

REMARKS

This is a full and timely response to the Office Action mailed May 11, 2005.

Reconsideration and allowance of the application and presently pending claims are respectfully requested. Upon entry of the amendments in this response, claims 19 – 20, 22 – 23, and 26 – 41 are pending. In particular, Applicants have amended claims 19, 26, 29, 32, 36, and 40. Applicants should not be presumed to agree with any statements made by the Examiner in the Office Action unless otherwise specifically indicated by the Applicants. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

I. Claims 26, 29, 36 and 40 Comply with 35 U.S.C. §112, First Paragraph

The Office Action rejects claims 26, 29, 36 and 40 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. Specifically, the Office Action alleges that “the claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.” (Office Action, pg. 2).

Specifically, the Office Action indicates that claims 26, 29, 26 and 40 use the term “preauthorized level of service,” which is apparently alleged not to appear in the specification. However, the Office Action indicates that “the specification does disclose authorized level of service.” (Office Action, pg. 2).

Applicants note that the claimed “preauthorized level of service” was claimed as part of the application as originally filed (see, for example, claims 7 and 26 of the application as filed). Accordingly, for at least the reason that the claims form part of the specification,

Applicants submit that the §112 rejection is misplaced.

However, in an effort to expedite prosecution of the application and obtain early allowance, Applicants have amended claims 26, 29, 36, and 40 to recite an “authorized level of service” which the Office Action apparently indicated is disclosed in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Accordingly, Applicants submit that the §112 rejection should be withdrawn.

II. Claims 19 and 32 Comply with 35 U.S.C. §112, Second Paragraph

The Office Action rejects claims 19 and 32 under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

First, the Office Action alleges that “claims 19 and 32 disclose monitoring data and then storing data related thereto,” and that “the claims do not distinctly claim a difference between the two mentions of data.” (Office Action, pg. 2). Without acquiescing to the §112, second paragraph rejection, Applicants have amended each of claims 19 and 32 to expressly distinguish between the two references to data.

Second, the Office Action alleges that “claim 32 recites the limitation ‘the data transmitted’ in the third limitation” and that “there is insufficient basis for this limitation in the claim, since an earlier reference is to ‘an amount’ of data transmitted.”

Applicants strongly disagree that there is insufficient basis for the limitation of “the data” in claim 32 as alleged. However, again, in an effort to expedite prosecution and obtain early allowance, Applicants have removed reference to “the data transmitted” in the third

limitation. Accordingly, Applicants submit that the §112, second paragraph rejection to claims 19 and 32 should be withdrawn.

III. Claims 19, 20, 22, 23 and 26 - 41 are Patentable Over *Liebowitz* in View of *Szurkowski*

The Office Action rejects claims 19, 20, 23 and 26 – 41 under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,812,545 Liebowitz (“*Liebowitz*”) in view of U.S. Patent No. 5,631,846 Szurkowski (“*Szurkowski*”).

Applicants respectfully submit that claims 19, 20, 23 and 26 – 41 are not obvious for at least the reason that the proposed combination of *Liebowitz* and *Szurkowski* does not disclose, teach, or suggest each and every element of the claimed invention.

Independent Claim 19

Applicants submit that independent claim 19 is patentable over the proposed combination of *Liebowitz* and *Szurkowski* for at least the reason that neither *Liebowitz*, nor *Szurkowski*, disclose, teach or suggest the step of “***monitoring an amount of data rejected as exceeding a requested bandwidth and storing data related to said amount of data rejected as exceeding said requested bandwidth***” as recited in independent claim 19.

Applicants agree with the Office Action indication that “*Liebowitz* does not disclose monitoring an amount of data rejected as exceeding a requested bandwidth and storing data related thereto.” (Office Action, page 4). However, the Office Action alleges that, “*Szurkowski*, in the same field of endeavor, discloses monitoring an amount of data rejected as exceeding a requested bandwidth and storing data related thereto [*Szurkowski*, col. 4, line 40 - col. 5, line 30]” (Office Action, page 4), and that “it would have been obvious to one

having ordinary skill in the art at the time the invention was made to incorporate the monitoring of exceeding data, taught by *Szurkowski*, into the monitoring system, taught by *Liebowitz*, in order to provide a sufficient upstream channel.” (Office Action, page 4).

However, unlike claim 19 which recites “monitoring an amount of data rejected as exceeding a requested bandwidth,” *Szurkowski* discloses that “the set of spectrum analysis equipment 114 monitors each upstream channel within the upstream spectrum,” (Col. 4, lines 55 – 57); and that while “scanning each upstream channel, the set of spectrum analysis equipment 114 determines the power on the upstream channel.” (Col. 4, lines 57 – 59). *Szurkowski* further discloses also that “the power on each upstream channel is sent to the controller 110” (Col. 4, lines 59 – 60) and that “the controller 110 finds and selects an upstream channel whose measure of interference is below the threshold value.” (Col. 4, lines 60 – 62). Further, *Szurkowski* indicates that “in order to gather historical information, the controller simply stores the signals representing the power levels over time.” (Col. 5, lines 5 – 7).

Applicants submit that “monitoring an amount of data rejected as exceeding a requested bandwidth” as recited in claim 19, is not equivalent to monitoring a “power level” as recited in *Szurkowski*. Similarly “storing data related to said amount of data rejected as exceeding said requested bandwidth” as recited in claim 19 is not equivalent to storing “signals representing the power levels over time.”

Furthermore, Applicants also submit that it would not be obvious to one skilled in the art at the time of the invention to incorporate the step of “monitoring an amount of data rejected as exceeding a requested bandwidth and storing data related to said amount of data rejected as exceeding said requested bandwidth” as recited in independent claim 19. In fact, Applicants fail to see any teaching or suggestion that the features directed to “statistics for

billing users of data services” as recited in claim 19 are applicable to the “methods and associated devices for minimizing the undesirable effects of interference signals in the upstream spectrum of a multi-user interactive system” (Abstract) of *Szurkowski*.

Accordingly, because the proposed combination of *Szurkowski* and *Liebowitz* does not disclose, teach or suggest the feature of “***monitoring an amount of data rejected as exceeding a requested bandwidth and storing data related to said amount of data rejected as exceeding said requested bandwidth***” as recited in claim 19, the rejection should be withdrawn and the claim allowed for this reason alone.

Independent Claim 32

Applicants submit that independent claim 32 is patentable over the proposed combination of *Liebowitz* and *Szurkowski* for at least the reason that neither *Liebowitz*, nor *Szurkowski*, disclose, teach or suggest the step of “***monitoring a bit error rate of said upstream connection and storing data related to said bit error rate of said upstream connection***” as recited in independent claim 32.

Liebowitz discloses only that the “frame handler module 64 performs error checking,” (col. 4, lines 39 – 40) and that “invalid frames are discarded, and a record is preferably kept of all errors for network management purposes.” (Col. 4, lines 40 – 42). Accordingly, Applicants submit that *Liebowitz* does not disclose using a “bit error rate” at all. Accordingly, there can be no “monitoring of the bit error rate” or “storing data related to said bit error rate” as recited in claim 32. By definition, a “rate” is a comparison of a first measurement to some other measurement. However, at most, *Liebowitz* discloses only that “a record is preferably kept of all errors,” (col. 4, line 41) which is not the same as storing a “bit error rate.” Furthermore, it is not clear what “record” *Liebowitz* proposes to keep with

respect to the “errors.” For example, the mere keeping a “record” that an error occurred would not provide, by itself, information useful for the “method of providing statistics for billing users of data services” as recited in claim 32.

Furthermore, *Szurkowski* also does not disclose, teach, or suggest “***monitoring a bit error rate of said upstream connection and storing data related to said bit error rate of said upstream connection***” as recited in claim 32. *Szurkowski* discloses that “if a robust modulation technique is used, the lower the bit error rate on a channel will be for a given amount of interference” (col. 5, lines 12-14), and that “as long as the bit error rate is below a certain value, upstream signals may be sent on the upstream channel without being noticeably affected by interference.” (Col. 5, lines 15- 17). This is the sum total of the reference in *Szurkowski* as to a “bit error rate.” Notably, *Szurkowski* does not disclose “monitoring a bit error rate,” nor “storing data related to said bit error rate.” Rather, at most, *Szurkowski* appears to suggest providing a low bit error rate by selecting a channel with a low measured amount of interference based on the modulation technique used in a particular application. (See col. 4, line 40 – col. 5, line 30).

Accordingly, because the proposed combination of *Szurkowski* and *Liebowitz* does not disclose, teach or suggest the feature of “***monitoring a bit error rate of said upstream connection and storing data related to said bit error rate of said upstream connection***” as recited in claim 32, the rejection should be withdrawn and the claim allowed for this reason alone.

Dependent Claims 20, 22 - 23, 26 – 31 and 33 – 41

Applicants submit that the rejection to claims 20, 22 -23, 26 – 31 and 33 – 41 is rendered moot in light of any of the arguments made above and, therefore, claims 20, 22 -

23, 26 – 31 and 33 – 41 are allowable as a matter of law for at least the reason that claims 20, 22 - 23, 26 – 31 and 33 – 41 contain all the features and elements of its corresponding independent claim.

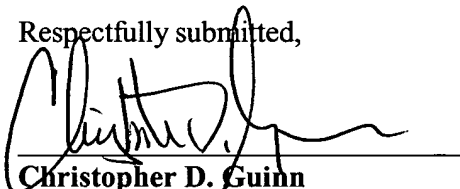
CONCLUSION

The Applicants respectfully submit that all claims are now in condition for allowance, and request that the Examiner pass this case to issuance. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and official notice, or statements interpreted similarly, should not be considered well known since the Office Action does not include specific factual findings predicated on sound technical and scientific reasoning to support such conclusions.

No fee is believed to be due in connection with this response. If, however, any fee is deemed to be payable, you are hereby authorized to charge any such fee to Deposit Account No. 20-0778.

Respectfully submitted,



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